



# SHRAPNEL<sup>®</sup> BIOLOGICAL SUPPORT

## A selective herbicide containing phenmedipham for post-emergence use on annual broad-leaved weeds in sugar beet.

ADAMA found the mixtures outlined in the table below to be biologically compatible.



#### Application Timing/Recommended Dose (L/kg/ha)

iRAPNEL® (+/- Oil)   Image: Problem in the image:	and the second	Pre- emergence	Crop emergence BBCH 09	From fully expanded cotyledon T1 at crop stage BBCH 10 to 12	<b>+7-10 days</b> BBCH 12 to 16	<b>+7-10 days</b> BBCH > 16
iRAPNEL® + GOLTIX® 70SC (+/- Oil) - 0.75 + 1.0 1.0 + 1.66 + 1.0 + 1.66 + 1.25 + 1.66 +   iRAPNEL® + GOLTIX® 70SC (+/- Oil) - - 0.75 + 1.0 1.0 + 1.66 + 1.0 + 1.66 + 1.0 + 1.66 +   iRAPNEL® + GOLTIX® 70SC (+/- Oil) 3.0 - 1.0 + 1.06 1.0 + 1.66 + 1.0 + 1.66 +   iRAPNEL® + GOLTIX TITAN® (+/- Oil) 3.0 - 1.0 + 1.0 1.0 + 1.0 1.0 + 1.0   iRAPNEL® + Safari Lite + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 1.0 1.0 + 2.0 1.0 + 2.0   iRAPNEL® + Safari Lite (+/- Oil) - - 1.0 + 1.0 1.0 + 2.00 1.0 + 2.00 1.0 + 2.00   iRAPNEL® + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 1.0 1.0 + 2.00 1.0 + 2.00 1.0 + 2.00   iRAPNEL® + Debut + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 0.05 1.0 + 0.05 1.0 + 0.05 1.0 + 0.05 1.0 + 0.05 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 + 0.75 1.0 + 0.04 +	SHRAPNEL® (+/- Oil)	-	1.0	1.0	1.0	-
IRAPNEL® + GOLTIX 770SC (+/- Oil) - - - 1.0 + 1.66 + 1.0 + 1.66 +   IRAPNEL® + GOLTIX TITAN® (+/- Oil) 3.0 - 1.0 + 1.0 1.0 + 1.0 1.0 + 1.0   IRAPNEL® + GOLTIX TITAN® (+/- Oil) 3.0 - 1.0 + 2.0 1.0 + 2.0 1.0 + 2.0   IRAPNEL® + GOLTIX TITAN® (+/- Oil) - - 1.0 + 2.0 1.0 + 2.0 1.0 + 2.0   IRAPNEL® + Safari Lite + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 187g + 0.5 - 1.0 + 280g + 0.5   IRAPNEL® + Safari Lite + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 280g 1.0 + 280g 1.0 + 280g   IRAPNEL® + Safari Lite (-/- Oil) - - - 1.0 + 280g 1.0 + 280g 1.0 + 280g 1.0 + 280g   IRAPNEL® + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 280g 1.0 + 280g 1.0 + 280g 1.0 + 280g 1.0 + 200g + 0.4 1.0 + 280g	SHRAPNEL® (+/- Oil)	-	-	1.0	1.0	1.0
IRAPNEL® + GOLTIX TITAN® (+/- Oil) 3.0 - 1.0 + 1.0 1.0 + 1.0 1.0 + 1.0   IRAPNEL® + GOLTIX TITAN® (+/- Oil) - - - 1.0 + 2.0 1.0 + 2.0 1.0 + 2.0   IRAPNEL® + Safari Lite + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 1879 + 0.5 - 1.0 + 2.80g 1.0 + 2.80g   IRAPNEL® + Safari Lite (+/- Oil) - - - 1.0 + 2.80g 1.0 + 2.80g 1.0 + 2.80g   IRAPNEL® + Safari Lite (+/- Oil) - - - 1.0 + 2.80g 1.0 + 2.80g 1.0 + 2.80g   IRAPNEL® + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - - 1.0 + 0.400 + 0.5 1.0 + 0.400 + 0.5   IRAPNEL® + Debut + Venzar (+/- Oil) -	SHRAPNEL® + GOLTIX® 70SC (+/- Oil)	-	0.75 + 1.0		1.0 + 1.66 +	1.25 + 1.66 +
Image: And the second secon	SHRAPNEL® + GOLTIX® 70SC (+/- Oil)	-	-	1.0 + 1.66 +	1.0 + 1.66 +	1.0 + 1.66 +
Image: Apple Appl	SHRAPNEL® + GOLTIX TITAN® (+/- Oil)	3.0	-	1.0 + 1.0	1.0 + 1.0	1.0 + 1.0
Image: And the state of th	SHRAPNEL® + GOLTIX TITAN® (+/- Oil)	-	-	1.0 + 2.0	1.0 + 2.0	1.0 + 2.0
IRAPNEL® + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - 1.0 + 0.4 + 0.75 1.0 + 0.4 + 0.75   IRAPNEL® + Debut + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - - - 1.0 + 0.4 + 0.75   IRAPNEL® + Debut + Venzar + Goltix Flo/Bettix Flo (+/- Oil) - - - - 1.0 + 0.30g + 0.4 + 0.75   IRAPNEL® + Debut + Venzar (+/- Oil) - - 1.0 + 20g + 0.4 1.0 + 30g + 0.4   IRAPNEL® + Venzar (+/- Oil) - - 1.0 + 0.2 1.0 + 0.4 1.0 + 30g + 0.4   IRAPNEL® + Debut (+/- Oil) - - 1.0 + 0.2 1.0 + 0.4 1.0 + 0.4   IRAPNEL® + Debut (+/- Oil) - - - 1.0 + 20g 1.0 + 0.4 1.0 + 0.4   IRAPNEL® + Debut (+/- Oil) - - 1.0 + 20g 1.0 + 0.4 1.0 + 0.4   IRAPNEL® + Dow Shield 400 (+/- Oil) - - 1.0 + 0.25 1.0 + 0.25 1.0 + 0.25	SHRAPNEL® + Safari Lite + Goltix Flo/Bettix Flo (+/- Oil)	-	-	1.0 + 187g + 0.5	-	1.0 + 280g + 0.5
Image: Apple in the period of the period	SHRAPNEL® + Safari Lite (+/- Oil)	-	-	1.0 + 280g	1.0 + 280g	1.0 + 280g
Image: Apple 1 with the sector of the sec	SHRAPNEL® + Venzar + Goltix Flo/Bettix Flo (+/- Oil)	-	-	1.0 + 0.4 + 0.75	1.0 + 0.4 + 0.75	1.0 + 0.4 + 0.75
HRAPNEL® + Venzar (+/- Oil) - - - 1.0 + 0.2 1.0 + 0.4 1.0 + 0.4   HRAPNEL® + Debut (+/- Oil) - - - 1.0 + 20g 1.0 + 20g 1.0 + 30g   HRAPNEL® + Dow Shield 400 (+/- Oil) -	SHRAPNEL® + Debut + Venzar + Goltix Flo/Bettix Flo (+/- Oil)	-	-	-	-	1.0 + 30g + 0.4 + 0.5
HRAPNEL® + Debut (+/- Oil) - - 1.0 + 20g 1.0 + 20g 1.0 + 30g   HRAPNEL® + Dow Shield 400 (+/- Oil) - - - 1.0 + 0.25 1.0 + 0.25 1.0 + 0.25	SHRAPNEL® + Debut + Venzar (+/- Oil)	-	-	1.0 + 20g + 0.4	1.0 + 20g + 0.4	1.0 + 30g + 0.4
HRAPNEL® + Dow Shield 400 (+/- Oil)   -   -   1.0 + 0.25   1.0 + 0.25   1.0 + 0.25	SHRAPNEL® + Venzar (+/- Oil)	-	-	1.0 + 0.2	1.0 + 0.4	1.0 + 0.4
	SHRAPNEL® + Debut (+/- Oil)	-	-	1.0 + 20g	1.0 + 20g	1.0 + 30g
IRAPNEL® + Goltix Flo + Dow Shield 400 (+/- Oil)   -   -   -   1.0 + 1.0 + 0.25	SHRAPNEL® + Dow Shield 400 (+/- Oil)	-	-	1.0 + 0.25	1.0 + 0.25	1.0 + 0.25
	SHRAPNEL® + Goltix Flo + Dow Shield 400 (+/- Oil)	-	-	-	-	1.0 + 1.0 + 0.25

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## 2-Way Mixes

The following tank mixes have been tested under continuous agitation for physical compatibility with SHRAPNEL® and will mix at recommended rates. Those products or mixes highlighted in **bold** have been tested in field trials and are supported biologically.

#### Herbicides

Bettix Flo	Efeckt	Fusilade Max	Oblix 500	Venzar 500SC
Debut	Ethefol	Goltix 70SC	Safari Lite WSB	Goltix Titan
Dow Shield 400	Falcon	Leopard 5EC	Torero	Powertwin

### Adjuvants

	Cropspray 11E	Phase II	Spraymate	Toil
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## **Micro-Nutrients**

CoRoN

The following tank mixes have been tested under continuous agitation for physical compatibility with SHRAPNEL® and will mix at recommended rates. Those products or mixes highlighted in **bold** have been tested in field trials and are supported biologically.

## **3-Way Mixes**

Bettix Flo + Debut	Debut + Oblix 500	Safari Lite WSB + Goltix 70SC
Bettix Flo + Dow Shield	Debut + Venzar 500SC	Torero + Debut
Bettix Flo + Efeckt	Dow Shield 400 + Safari Lite WSB	Torero + Dow Shield 400
Bettix Flo + Ethofol	Goltix 70 SC + Leopard 5EC	Torero + Falcon
Bettix Flo + Falcon	Goltix 70SC + Debut	Torero + Leopard 5EC
Bettix Flo + Leopard 5EC	Goltix 70SC + Dow Shield 400	Venzar + Goltix 70SC
Bettix Flo + Oblix 500	Goltix 70SC + Efeckt	Venzar 500SC + Falcon
CoRoN + Torero	Goltix 70SC + Ethofol	Venzar 500SC + Leopard 5EC
Debut + Efeckt	Goltix 70SC + Falcon	
Debut + Ethefol	Goltix 70SC + Oblix 500	

## **4-Way Mixes**

70SC + Venzar 500SC
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# 5-Way Mixes

Goltix Titan + Falcon + Powertwin + Tepekki\*

\*Physically compatible although ADAMA would advice against the mixing of insecticides with herbicides.

When using tank mixes always follow the statutory conditions of all tank mix partners. Physical compatibility tests check that the products will mix and are suitable for application through a conventional sprayer and may not be approved tank mixes. These tests do not check for any adverse crop effects or the biological efficacy of the individual products when applied in a tank mix. ADAMA Agricultural Solutions UK Ltd gives no warranty and accepts no liability in respect of physical compatibilities and use is at growers own risk. GOLTIX TITAN® is a registered trademark of the ADAMA group. GOLTIX TITAN® contains 40g/L (3.4% w/w) quinmerac and 525g/L (45.1% w/w) metamitron. Use plant protection products safely. Always read the label and product information before use. For further product information, including warning phrases and symbols, refer to www.adama.com/uk or call The Technical Helpline on 01635 876 622. ADAMA Agricultural Solutions UK Ltd. Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 45A. Telephone 01635 860 555. UKenquiries@adama.com.